

NOTES ON SOME UNUSUAL BREEDING-PLACES OF *STEGOMYIA FASCIATA*, FABR., IN AUSTRALIA

BY

G. F. HILL, F.E.S.

*From the Australian Institute of Tropical Medicine,
Townsville, Queensland*

(Received for publication 1 March, 1921)

PLATE XV

Although generally regarded as a domestic species, there are several records of *S. fasciata* breeding in rot-holes in trees and in water-retaining plants; this habit, however, appears to have escaped notice hitherto in Australia.

On 20th January, numerous larvae and pupae of this species and of *Ochlerotatus notoscriptus*, Skuse, were collected from a tin containing about 5 inches of water and a quantity of decaying leaves, which was found in the dense scrub 600 yards distant from the nearest of several seaside dwellings on Magnetic Island. Several adult *Stegomyia* which were captured at the same time (1 p.m.) while attempting to bite, and others which were bred from the larvae and pupae, were noticed to be distinctly darker and smaller than the forms found throughout the year in the Institute buildings. In order to determine the permanency of this dark form, a number of these males and females were bred from for five generations under the usual laboratory conditions, and concurrently with an equal number of generations from individuals of the lighter coloured form commonly found in dwellings. From both series males and females of each generation were secured for comparison, the experiment being terminated, in the case of the dark form, with the sixth generation, which comprised males only. An examination of the material thus obtained showed that the light form bred true, *i.e.*, the individuals of each generation did not differ from their progenitors, whilst the dark form produced, in each generation

after the first, a proportion of individuals of both forms, as well as intermediate forms. In both series some variation was noticed in the shape and width of the outer lyre-shaped thoracic ornamentation and in the length and width of the median thoracic stripes, but in none were the latter entirely absent, a character recorded by Taylor (1914).

The island referred to above lies in Cleveland Bay, about four miles distant from Townsville, and was formerly utilised as a site for the port Quarantine Station.

On 5th May, a considerable number of mosquito larvae were siphoned from a rot-hole in a poinciana tree (Plate XV), growing in the Hospital grounds and distant about 70 yards from the nearest dwelling. In addition to *Macleava tremula*, Theobald, and *Ochlerotatus quasirubri thorax*, Theobald,* this collection produced a large number of *Stegomyia fasciata*, similar in size and colouration to the Magnetic Island form. On 7th September, another batch of larvae and pupae were collected from this hole, and from them about one hundred adults were bred. In this case the males were of about the average size, but quite as dark as any I have seen, whilst the females were of the light form and unusually large.

REFERENCE

- TAYLOR, F. H. (1914). *Proceedings of the Linnean Society of New South Wales*. Vol. XXXIX, p. 455.

* Identified by Mr. F. W. EDWARDS, as a variety of this species.



ROT-HOLE IN POINCIANA TREE.
BREEDING PLACE OF *OCHLEROTATUS QUASIRUBRITHORAX*,
MACLEAYA TREMULA AND *STEGOMYIA FASCIATA*